# THE GENERA HENRICOHAHNIA BREDDIN, DICROTELUS ERICHSON, NYLLIUS STÅL, ORGETORIXA CHINA AND ALLIED NEW GENERA

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# THE GENERA HENRICOHAHNIA BREDDIN, DICROTELUS ERICHSON, NYLLIUS STÅL, ORGETORIXA CHINA AND ALLIED NEW GENERA

# (HEMIPTERA-HETEROPTERA, REDUVIIDAE, HARPACTORINAE, DICROTELINI)

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#### SYNOPSIS

This paper contains a revision of the genus *Henricohahnia* Breddin, descriptions of new allied genera, also descriptions and figures of the genus *Nyllius* Stål, new genera allied to it and new species of *Orgetorixa* China.

THE genus *Henricohahnia* was erected by Breddin in 1900 (*Deutsche ent. Zeit.*: 184–185) for the reception of a somewhat bizarre reduviid from the Tengger Mountains of East Java. He gave it the specific name of *wahnschaffei*.

In 1903 Distant erected the genus Forestus (Ann. Mag. Nat. Hist. 12: 251-253) and placed in it four species—typicus, montanus, spinosus and inermis but, in 1904 (Fauna Brit. India. Rhynchota 2: 389) he transferred them to Henricohahnia. In the same year and publication (loc. cit.) he described a new species—Henricohahnia gallus—and in 1909 another new species—H. badgleyi (Ann. Soc. ent. Belg. 53: 373).

A critical examination of the species described by Distant, however, has revealed that the species *inermis* and *badgleyi* should not have been placed in *Henricohahnia*. Accordingly I have erected a new genus—*Karenocoris*—for them.

In the present paper I have also described two more new allied genera—Tapirocoris and Malaiseana—both of which are allied to Henricohahnia.

I have revised all previous descriptions of *Henricohahnia* species with the exception of that of *wahnschaffei* which is given in the original. A few remarks supplementary to Breddin's generic description, however, are added.

All species are figured for the first time except Henricohahnia typica (Distant).

All the known genera in the Dicrotelini are keyed on pages 466 and 474.

Nothing appears to be known about the ecology of *Henricohahnia* or of any of the other new genera described herein, but it is probable, to judge by their habitus, that they pass some portion of their lives under the loose bark of dead trees.

The types and paratypes of all the new species are in the British Museum (Natural ENTOM. 111, 12. 30

History) with the exception of the type and paratype of *Neonyllius echinus* gen. et sp. n., which are in the Vienna Museum.

For the genera Nyllius and Dicrotelus, Stål proposed the tribal name of Dicrotelini (1859, Öfv. Vet. Ak. Förh. 16 (8): 366). To this tribe I consider that the genera Neonyllius gen. nov., Paranyllius gen. nov., Orgetoriza China, and Henricohahnia Breddin also belong.

I express my thanks to Dr. Stevan Kéler of the Zoological Museum Berlin, for his kindness in allowing me to examine the types of Dicrotelus prolixus Erichson and Nyllius asperatus Stål. I am also indebted to Dr. W. E. China of the British Museum (Nat. Hist.) for his assistance in elucidating the synonymy of Sphagiastes Stål.

#### Henricohahnia Breddin

Henricohahnia Breddin, 1900, Deutsche ent. Zeit.: 184-185. Forestus Distant, 1903, Ann. Mag. Nat. Hist. (12); 251-253, type F. typicus Distant; Distant,

1904, Fauna Brit. India, Rhynchota, 2, 389; Distant, 1909, Ann. Soc. ent. Belg. 53: 373.

Capite a supero viso longe cylindrico, pronoto fere aequilongo, antrorsum in processum compressum angustum, a latere viso acutangularem longe prominente ; capite postoculari quam parte anteoculari cum oculis ipsis nonnihil longiore, retrorsum levissime angustato; capitis impressione superiore pone oculos minusculos obsoleta, fere nulla, ocellis punctiformibus ab oculis sat remotis. Capite supra granulis paucis setigeris, haud tamen spinulis instructo, infra utrimque spinulis paucis seriatis armato. Rostri articulo basali marginem posticum oculorum haud attingente, quam articulo secundo plus duplo breviore. Antennis breviusculis, capite pronotoque simul sumptis brevioribus, dimorphis ; articulo primo subclavato capite postoculari multo breviore et articulis secundo tertioque singulis in 3 breviore, in Q subaequilongo; primo tuberculis compressis et obtusatis sublobiformibus horrente, secundo in 9 supra paucis eiusmodo dentibus armato, in 3 inermi, piloso. Antepronoto tuberculis nonnullis acutiusculis, post-pronoto granulis sparsis armatis, pone humeros retrorsum sat longe producto. Scutelli apice sat angusto. Hemelytrorum areola discali valde elongata atque angusta. Membranae area interiore valde parva, quam area exteriore basi ter angustiore eademque area duplo breviore ; area exteriore retrorsum distincte dilatata. Abdominis marginibus in lobos mediocres dilatatis. Prostethio in sulci lateribus utrimque tuberculis nonnullis, mesostethio antice latera versus nodulo distincto armatis. Ventre medio subtiliter carinato. Femoribus quam tibiis multo longioribus, anterioribus subincrassatis. Femoribus omnibus supra et extus spinulis fortibus numerosis seriatis, anterioribus subtus serie unica subobliqua spinularum paucarum armatis. Tibiis anterioribus supra spinulis crassis nonnullis minoribus, anticis subtus paucis maioribus instructis.

Breddin omits to mention in his generic description that the coxae and trochanters are spinose and that the basal areas of the membranal cells are more or less coriaceous.

At the conclusion of his description of the genus, Breddin adds : " genus singulare inter Blaptonem et Sclominam ordinandum." However, I consider the relationship of *Henricohahnia* to these two genera to be very remote, for the following reasons. In Sclomina Stål (1861, Ent. Zeit. Stett. 22: 137) all segments of the antennae are slender and the basal segment is approximately twice as long as the head, the rostrum is more or less curved (as in the majority of the Harpactorinae), the head is not cylindrical, the transverse sulcus is deep and wide and the vertex is not produced anteriorly. The spines on the head in Sciomina are long and slender. The pronotum has long slender spines and the posterior margin of the posterior lobe is

almost straight. In the hemelytra the internal cell of the membrane is about two-thirds as long and one-third wider than the external cell and the venation of the corium is different in having a small, triangular cell adjacent to the discal cell.

Blapton was established by Spinola in 1850 (separata from Mem. Matem. fisica, Soc. ital. Sci. 25 (1), 1852, 88 and 144).

Spinola states that "ha per tipo una specie di Cayenna discritta dai Signori Amyot e Serville, vedi *Hist. des Hemypt.* 376, 113, *Sinea punctipes* Amyot e Serville." The type-species of the genus *Blapton* Spinola, 1850, is thus, undoubtedly, *Sinea punctipes* Amyot & Serville, 1843. But this S. American species is congeneric with the Brazilian *Milyas ornaticeps* Stål, 1858, which is the type species of the genus *Milyas* Stål, 1858, which, because it was preoccupied, was re-named *Pselliopus* by Bergroth (1905, *Rev. Ent.*, : 112). *Blapton* Spinola, 1850, thus has priority over *Pselliopus* Bergroth, 1905, and the South African genus *Blapton auctt.* nec Spinola takes the next available name, which is *Sphagiastes* Stål (1853, *Öfv. Vet. Ak. Förh.* : 43), type *S. horrificus* 1853 = ramentaceus Germar, 1837 = dregei Spinola, 1850.

There is one other species which has been placed in the genus *Blapton*, namely *Arilus pilipes* Stål (1855, *Öfv. Vet. Ak. Förh.*: 43). In 1912 Schouteden (*Rev. Zool. afr.* **2**: 114) considered that *B. pilipes* should be placed, at least, in a sub-genus of *Blapton* for which he proposed the name *Lepton*. In 1913 (*loc. cit.*: 437), having discovered that *Lepton* was preoccupied, Schouteden substituted the name *Lerton*. This genus is allied to, but is not a subgenus of *Sphagiastes*.

The affinity of *Henricohahnia* to *Sphagiastes* is remote. There is a slight similarity in the shape of the head and rostrum, but the armature of the head, the extraordinary spinose pronotum, particularly its posterior lobe, the unique structure of the connexivum and the tuberculate ventral surface of the abdomen, all indicate that these two genera are by no means closely related. Furthermore, in *Sphagiastes* the antennal segments and legs are slender and have compact tufts of short thick setae as well as normal setae. The abdomen in *Sphagiastes* is not carinate midventrally, the membranal cells are more or less equal in area and the membrane has irregularly ramate veins apically.

Henricohahnia, I think, is allied to Nyllius Stål (1859, Öfv. Vet. Ak. Forh. 16 (8): 355) and to Orgetorixa China (1925, Ann. Mag. Nat. Hist. (9) 15: 486–488) with which it has the following characters in common, namely the produced vertex, more or less cylindrical head, tuberculate and spinose pronotum with the posterior margin medially excavate.

*Dicrotelus* Erichson (1842, *Arch.*  $\mathbf{8}$  (1): 284) has certain affinities with these three genera but differs in having a slender habitus, a smooth integument and non-tuberculate connexivum and also in being brachypterous.

The venation of the hemelytra of *Henricohahnia* and *Nyllius* differs from that of *Orgetorixa* in having a relatively small but distinct internal membranal cell which *Orgetorixa* lacks. The presence, absence, or size of this cell, however, may not be of great importance, since it appears to vary somewhat and may be absent in individuals of species in which it is normally present. For example, the cell was absent from a paratype of *Nyllius asperatus* which I examined.

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#### Key to Henricohahnia species

1.	Humeral angles strongly spinously or conically produced	4.
	Humeral angles not or hardly at all produced	2.
2.	Head and pronotum without black pattern	. n.
	Head and pronotum with black pattern	3.
	Produced portion of vertex acute apically in lateral view vitticeps sp	. n.
	Produced portion of vertex broadly rounded apically in lateral view . gallus Dist	ant
	Humeral angles spinous	5.
	Humeral angles conical, thick, strongly recurved	6.
5.	Posterior margin of posterior pronotal lobe narrowly and deeply incised medially	
<i>_</i>	cauta sp	. n.
	Posterior margin of posterior pronotal lobe widely and shallowly incised medially	
	typica (Distan	nt).
	Produced portion of vertex truncate apically in lateral view	7.
	Produced portion of vertex rounded apically in lateral view .	8.
	Spines at humeral angles truncate apically	. n.
	Spines at humeral angles sub-acute apically	9.
8.	Posterior margin of posterior pronotal lobe undulate with moderately deep and wide	
	median incision montana (Dista	nt)
	Posterior margin of posterior pronotal lobe undulate with very shallow median	
	incision	lın.
9.	Posterior margin of posterior pronotal lobe undulate with very wide, shallow median	
	incision	
	Posterior margin of posterior pronotal lobe regularly undulate tinctoria sp	. n.

#### Henricohahnia wahnschaffei Breddin

(Fig. 1)

#### Deutsche ent. Zeit. 1900 : 184-185.

Colour: Ferruginescenti vel fuscescenti-cinerea, griseo pilosa tomentoque cinereo dense induta. Rostri apice, spinulis gulae, antennarum articulo primo apicem versus quartoque toto nec non femoribus supra tibiarumque maxima parte, ut videtur semper, nigris vel nigricantibus. Rostri articuli primi apice secundoque toto, tibiarum annulo distincto medio alioque subbasali obsoletiore, tarsis articulorum antennarum secundi et tertii parte basali quartique ima basi ferruginescentialbidis.

Structure : Capite infra pone oculos spinulis utrimque binis juxtapositis et basin versus tuberculis utrimque singulis armato. Post-pronoto basi late sinuato vel apertangulariter exciso; antice carinis duobus et magis extrorsum lineis utrimque singulis dense pilosis longitudinalibus, omnibus retrorsum divergentibus, inter humeros carinula utrimque transversali ex angulo humerali exeunte et intus mox evanescente instructo; hoc angulo sublobiformiter prominulo, spina extrorsum et valde retrorsum producta armato. Tuberculis spiniformibus femorum in series quatuor vel quinque ordinatis, anterioribus praeterea subtus spinis tribus vel quatuor armatis. Tibiis anticis subtus apicem versus spina forti ceterisque longiore calcariformi nonnihil extrorsum directa munitis. Abdomen in mare hemelytris clausis non multo in femina multo latiore, rhomboideo. Apice segmenti sexti connexivalis cum basi septimi in lobum apertangularem, apice segmenti quinti cum ima basi sexti in lobum mediocrem (in mare irregulariter quadrangularem postice extus acuminatum, in femina trapezoideum apice truncatum) dilatis, in femina angulo apicali segmenti etiam quarti apertangulariter extrorsum prominente. Abdominis margine toto tuberculis minutis setiferis, ventre connexivoque granulis sparsis instructis.

The measurements given by Breddin, are total length,  $13-15\cdot5$  mm.; greatest pronotal width,  $4-4\cdot75$  mm.

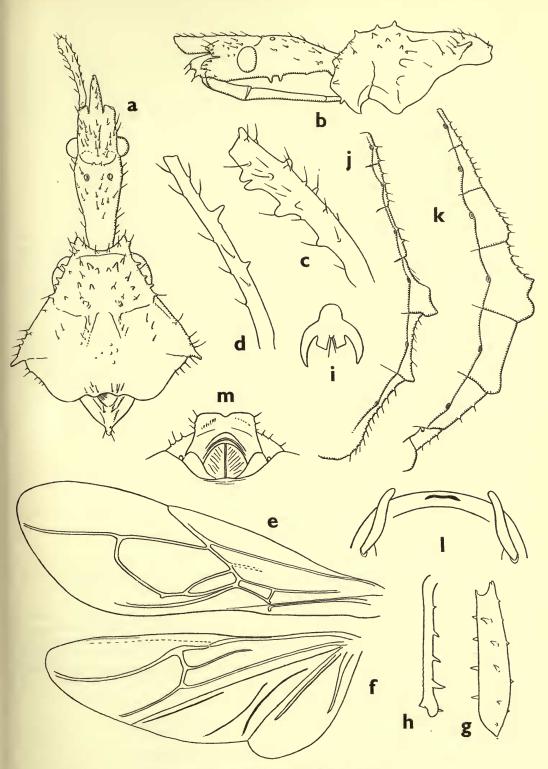


FIG. 1.-Henricohahnia wahnschaffei Breddin.

The specimens on which Breddin based his descriptions were collected by Junghuhn in the Tengger Mountains of East Java. In the British Museum there are also specimens collected by F. C. Drescher in other localities in Java, namely Gunong Slamet at an altitude of 2,200 ft., Gunong Tankoeban Prahoe between 4,000 and 5,000 ft., Gunong Boerangrang at about 4,000 ft. and Gunong Malabar at a similar altitude.

#### Henricohahnia gallus Distant

# (Fig. 2)

#### Henricohahnia gallus Distant, 1904, Fauna Brit. Ind. Rhynchota 2: 389.

Colour: Dark testaceous. Vertex with three longitudinal parallel stripes, postocular dorsally with two longitudinal parallel stripes not extending to base, laterally with an irregular stripe connecting posteriorly with dorsal stripes, black. Rostrum pale testaceous; segments I and 2 basally, segment 3 apically, suffused with dark brown. Anterior lobe of pronotum with black pattern as in Fig. 2. Corium suffused with piceous apically; membrane hyaline, pale testaceous; venation testaceous; base of veins of cells with a raised pale luteous spot. Apex of scutellum pale luteous; depressed area of disc piceous. Spines on legs pale yellow.

Structure : Basal segment of antennae strongly tuberculate, a little more than twice as long as produced portion of vertex ; tylus with tubercles ; produced portion of vertex apically from above sub-acute ; laterally sub-truncate. Head sparsely tuberculate. Anterior lobe of pronotum with sparse erect and sub-erect tubercles more or less regularly arranged ; posterior lobe medially depressed with a somewhat obscure, short carina bearing low tubercles, subdorsally ; lobe very sparsely tuberculate ; humeral angles sub-conical and with low setigerous tubercles ; posterior margin undulate. Disc of scutellum somewhat deeply depressed ; apex produced, horizontal, tuberculate. Hemelytra extending very little beyond apex of abdomen.

Total length, 9.00 mm.

Hemelytra, 5·50 mm.

Greatest pronotal width, 2.30 mm.

13 (holotype), 13, India, Kotagiri, in Brit. Mus. (Nat. Hist.).

#### Henricohahnia vitticeps sp. n.

(Fig. 3)

Colour: Testaceous. Vertex with a spot laterally, postocular with a wide, median stripe, very narrowly divided medially, and narrow lateral stripes; anterior lobe of pronotum with linear suffusion, disc of scutellum, black.

Structure : Basal segment of antennae less than twice as long as produced portion of vertex, with short, conical and long cylindrical tubercles bearing setae; segment 2 with few setigerous tubercles. Produced portion of vertex acute apically. Head and anterior lobe of pronotum sparsely tuberculate. Posterior lobe of pronotum somewhat deeply medially depressed with a carina on each side of depression; humeral angles not produced, rectangular, rounded; lobe very sparsely tuberculate; posterior margin undulate with median incision very broad and shallow. Disc of scutellum feebly transversely depressed posteriorly.

Total length, 11.00 mm.

Hemelytra, 6.50 mm.

Greatest pronotal width, 3.00 mm.

19 (holotype), Assam, Utakamund, in Brit. Mus. (Nat. Hist.).

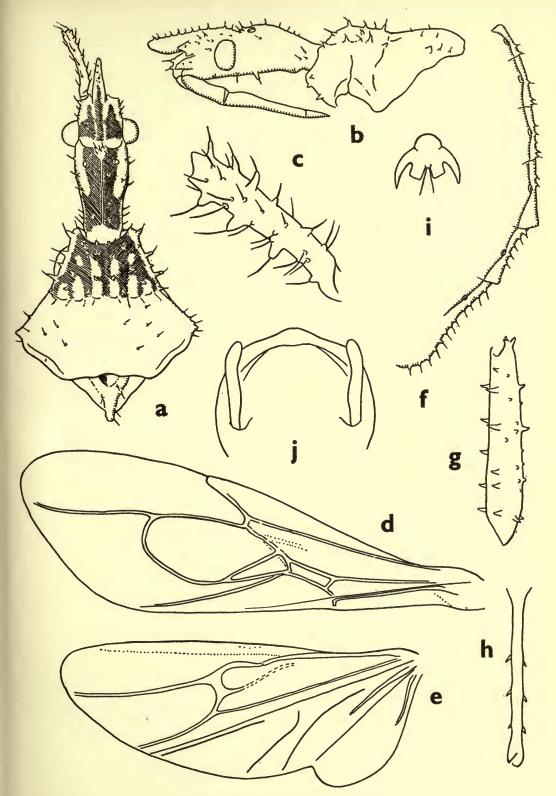


FIG. 2.-Henricohahnia gallus Distant.

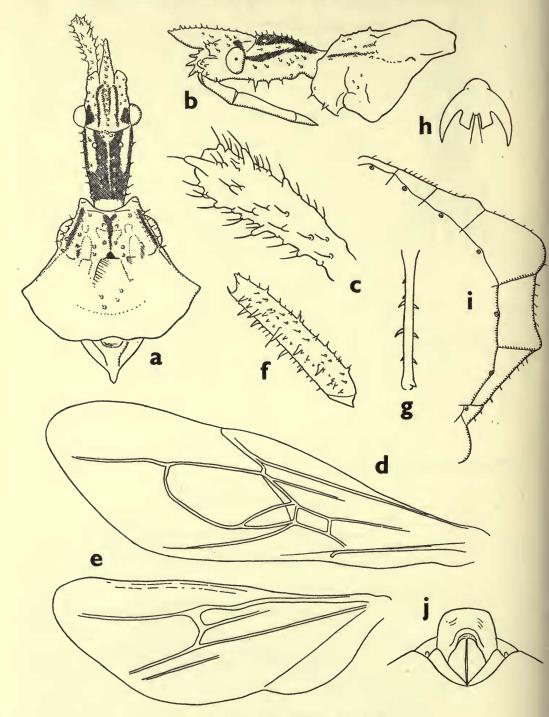


FIG. 3.—Henricohahnia vitticeps sp. n.

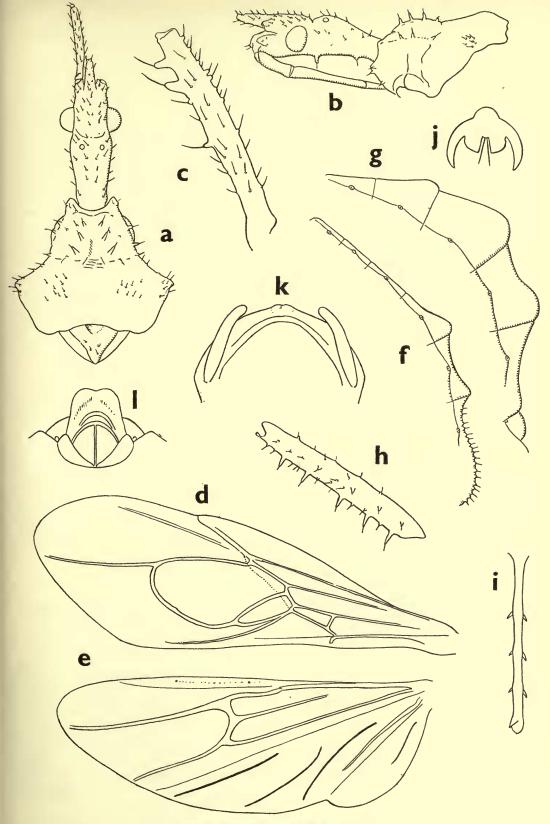


FIG. 4.—Henricohahnia indica sp. n.

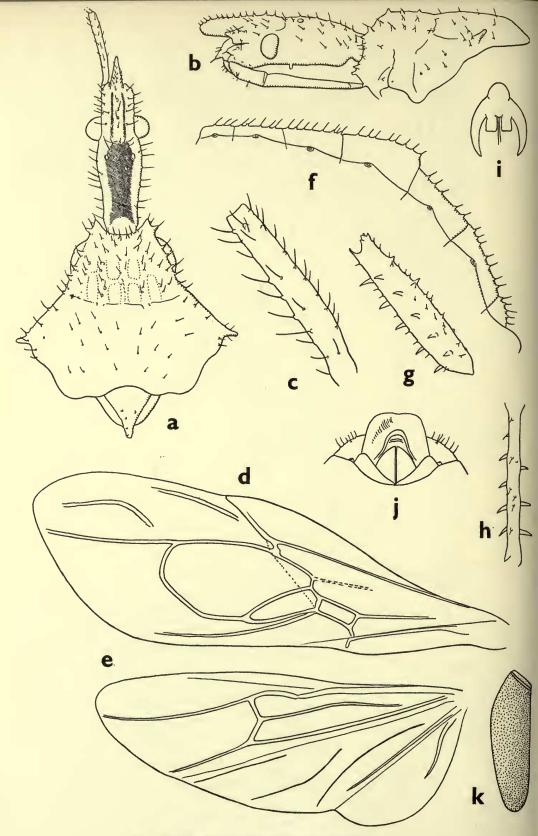


FIG. 5.—Henricohahnia spinosa (Distant).

## Henricohahnia indica sp. n.

(Fig. 4)

Colour: Segments I and 2 of antennae piceous; remaining segments brown. Head, anterior lobe of pronotum, scutellum piceous; anterior lobe of pronotum with two suffused yellowish spots medially basally; posterior lobe of pronotum, propleura, acetabula and abdomen ventrally, testaceous; meso- and metapleura and sterna piceous; meso- and metasternum with a median testaceous suffusion. Abdomen dorsally brown; connexivum suffused with black; tubercles on ventral surface brown; apex of 7th segment blackish. Corium dark testaceous with the cross-vein at base of internal cell, external half of basal vein of external cell and apex of vein R pale luteous; membrane pale infumate with a coppery lustre; metathoracic wings hyaline, iridescent. Legs blackish; base of anterior tibiae testaceous; spines on anterior femora dark yellow; median and posterior tibiae testaceous with dark brown annulations. Tubercles on anterior lobe of pronotum yellowish.

Structure : Antennae with abundant, moderately long forwardly directed setae and sparse longer setae ; basal segment feebly curved, thicker towards apex and thrice as long as produced portion of vertex ; tuberculate on lower surface, the apical tubercles the longest. Head sparsely tuberculate ; produced portion of vertex from the side rounded apicallv and with the sides sub-parallel ; tylus tuberculate not greatly produced. Lateral angles of collar obtusely conical ; anterior lobe of pronotum with a few moderately long setigerous tubercles sub-dorsally and laterally ; humeral angles obtusely conical ; posterior lobe of pronotum with very sparse, low tubercles ; posterior margin sinuate with median incision very wide and shallow. Disc of scutellum shallowly depressed. Hemelytra extending just beyond apex of abdomen. External apical angle of connexival segment 5 lobately produced, of segment 6 obtuse angulate. Anterior femora and tibiae with moderately long and short setigerous spines ; median and posterior femora with low, setigerous tubercles.

Total length : 3, 9.50 mm.; 9, 10.60 mm.Hemelytra : 3, 6.50 mm.; 9, 6.50 mm.Greatest pronotal width : 3, 2.50 mm.; 9, 3.00 mm.

13 (holotype) and 33, 29 (paratypes), S. India (no precise locality) (B.M. 1930– 599); 13, 19 (paratypes), S. India, Lovedale, Nilgiri Hills (B.M. 1915–60); 13 (paratype), S. India; Kodai Kanal (B.M. 1926–171); all collected by T. V. Campbell.

# Henricohahnia spinosa (Distant)

(Fig. 5)

Forestus spinosus Distant, 1903, Ann. Mag. Nat. Hist. (7) 11:252.

Henricohahnia spinosa (Distant), 1904, Fauna Brit. Ind. Rhynchota 2: 388.

Colour: Pale testaceous. Vertex with two parallel, narrow, longitudinal stripes, postocular with a wide median longitudinal stripe, black. Humeral spines light brown. Veins of discal cell of corium and apical margin, except extreme apex, pale luteous. Costal margin of corium suffused with piceous. Membrane pale infumate; venation testaceous. Segments 2, 5 and 6 apically and base of segment 7 of connexivum piceous; marginal tubercles mostly black. Spines on femora whitish, very narrowly brown apically. Metathoracic wings infumate; venation dark testaceous.

Structure. Basal segment of antennae sparsely tuberculate, a little more than twice as long as produced portion of vertex. Tylus more or less vertical with an apical tubercle. Produced portion of vertex rounded apically. Head and pronotum sparsely tuberculate. Posterior lobe of pronotum with indications of short carinae sub-dorsally; humeral angles spinously produced; posterior margin undulate with the median incision moderately deep. Disc of

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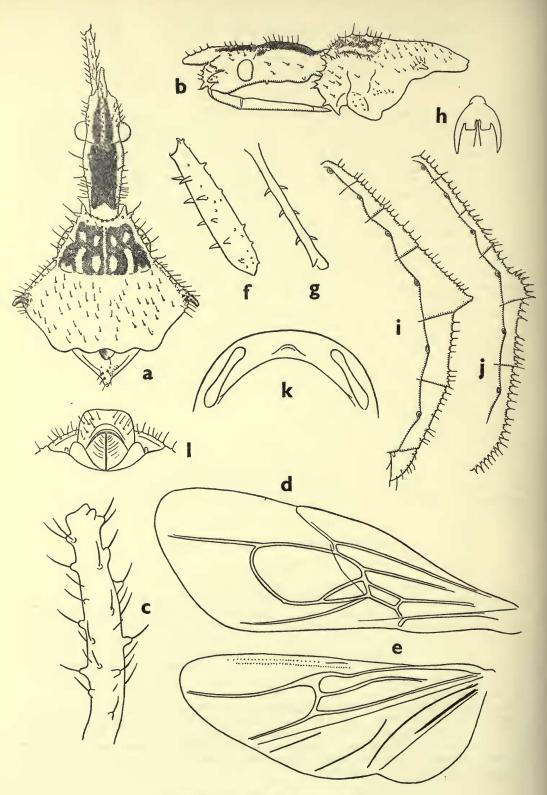


FIG. 6.—Henricohahnia tinctoria sp. n.

scutellum damaged; apex moderately produced, horizontal. Hemelytra extending just beyond apex of abdomen.

Total length, 12.50 mm. Hemelytra, 8.50 mm.

Greatest pronotal width, 3.50 mm.

19 (holotype), Assam; Sikkim (Atkinson Coll., B.M. 1892-6); 29, same locality (Distant Coll., B.M. 1911-383); 29, Bengale, Kurseong (Distant Coll., B.M., 1911-383); 19, Dharmoto, Kumaon, 5,600 ft., 9. vi. 1912 (A. D. Imms); 19, Chaurata. The ovum of H. spinosa is cylindrical, rather strongly curved at opercular end. Total length, 2.30 mm.

#### Henricohahnia tinctoria sp. n.

(Fig. 6)

Colour: Testaceous. Head with two longitudinal, parallel black stripes from base of produced portion of vertex to transverse sulcus and a wide black stripe thence almost to base. Ocelli margined with red. Anterior lobe of pronotum with piceous pattern as in Fig. 6. Spines at humeral angles piceous. Tubercles on both pronotal lobes brownish or piceous. Dorsal surface of abdomen, except connexivum, base of clavus broadly and of corium narrowly, red; corium apically with a U-shaped raised luteous spot; remainder of corium faintly suffused with red; vein Sc of metathoracic wing red. Connexivum with segments 2-6 dorsally with a large irregular piceous spot apically. Mesopleural episternum anteriorly suffused with piceous. Tubercles on pleura and abdomen ventrally piceous.

Structure: Basal segment of antennae more or less straight, not very strongly tuberculate and somewhat narrower towards apex; segment 2 about one-third longer than I and without tubercles. Head sparsely tuberculate. Basal segment of rostrum extending very little beyond anterior margin of eyes. Humeral angles spinously produced, the spines rounded apically and directed posteriorly somewhat; posterior lobe of pronotum with sparse, very low, setigerous tubercles; posterior margin regularly undulate, the median incision moderately deep. Disc of scutellum very deeply depressed; carina with a few low tubercles. All segments of connexivum with short, marginal tubercles; segment 7 of abdomen dorsally transversely rugose in apical half. Hemelytra extending just beyond apex of abdomen.

In the female paratype the basal antennal segment is more strongly tuberculate and segment 2 is relatively shorter and feebly tuberculate.

Total length : ♂, 12.00 mm. ; ♀, 13.50 mm. Hemelytra : ♂, 7.50 mm. ; ♀, 13.50 mm.

Greatest pronotal width : 3, 3.50 mm. ; 9, 4.00 mm.

13 (holotype), Sikkim, Rongli Chu, 3,000 ft., 29.iii.1924 (B.M. 1924-386); 13, 1º (paratypes), Sikkim, Singhik, 3,500 ft., 23.iv.1924 (B.M. 1924-386); coll. Maj. R. W. G. Hingston (B.M. Everest Expedition).

#### Henricohahnia vittata sp. n.

(Fig. 7)

Colour: Testaceous. Posterior lobe of pronotum with a diagonal, longitudinal stripe within depressions, pro- and mesopleura with a transverse stripe, metapleural acetabula and apex of tibiae piceous; coxae with suffused piceous spot. Corium testaceous; apical half of clavus, membrane and metathoracic wings infumate.

Structure: Basal segment of antennae twice as long as produced portion of vertex, feebly

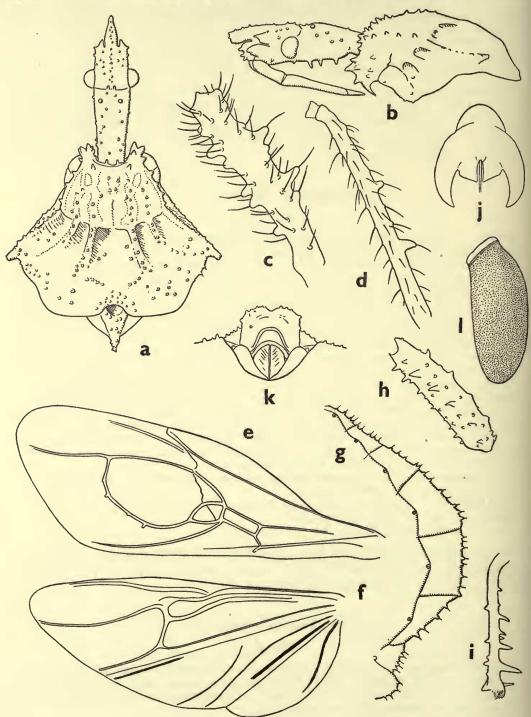


FIG. 7.—Henricohahnia vittata sp. n.

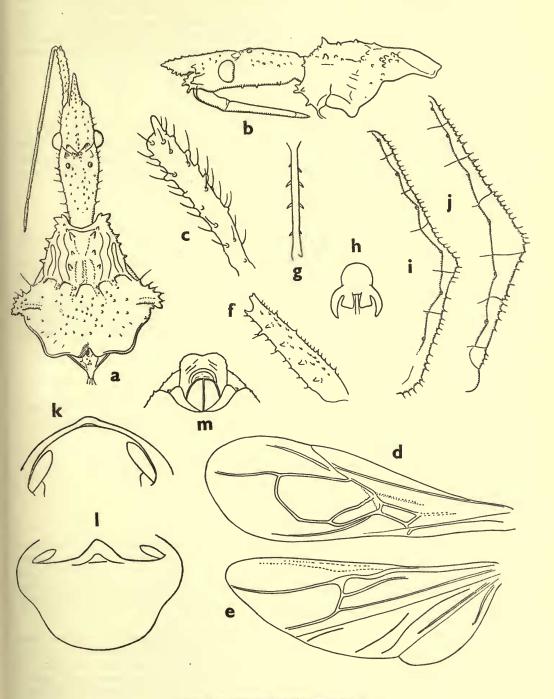


FIG. 8.—Henricohahnia cauta sp. n.

curved and strongly tuberculate. Head with abundant, erect, moderately long setae, sparsely tuberculate. Posterior lobe of pronotum with very strong sub-dorsal carinae and less strong lateral carinae; humeral angles tuberculately produced; median incision on posterior margin of lobe regularly concave. Disc of scutellum deeply depressed; carina and apex irregularly tuberculate. Head, body, legs with abundant setae. Anterior coxae and trochanters strongly, median coxae and trochanters, moderately tuberculate.

Total length, 18.00 mm.

Hemelytra, 12.00 mm.

Greatest pronotal width, 3.80 mm.

 $1^{\circ}$  (holotype), Indo-China; Laos, Xieng Khouang, 10.v.1919 (*R. V. de Salvaza*) (B.M. 1917–98). An ovum dissected from this female is dark brown with the differentiated portion of the chorion whitish. It is cylindrical, glabrous, somewhat narrower at the opercular end and with one side straight. Total length, 2.40 mm.

#### Henricohahnia cauta sp. n.

(Fig. 8)

Colour: Testaceous. Humeral angles of pronotum and apex of corium suffused with brown. Membrane and metathoracic wings faintly infumate, iridescent. Pygophore and metapleura suffused with piceous. Lateral tubercles of prosternum piceous.

Structure : Basal segment of antennae with short, conical setigerous tubercles and two longer cylindrical tubercles on upper surface, apically; remaining segments with sparse, moderately long, abundant, short setae. Produced portion of vertex from above very narrowly triangular, acute apically; from the side triangular, acute apically.

Total length : ♂, 12.00 mm. ; ♀, 12.10 mm.

Hemelytra : 3, 7.00 mm. ; 9, 7.00 mm.

Greatest pronotal width : 3, 3.50 mm.; 9, 3.30 mm.

13 (holotype), Indo-China, Haut Mekong, Nam Mat, 15.iv.1918;  $3^{\circ}$  (paratypes), Laos, Xieng Khouang, 7–17.v.1918 (*R. V. de Salvaza*) (B.M. 1918–1).

#### Henricohahnia typica (Distant)

(Fig. 9)

Forestus typicus Distant, 1903, Ann. Mag. Nat. Hist. (7) 11:251. Henricohahnia typica (Distant), 1904, Fauna Brit. Ind. Rhynchota 2:387.

Colour: Testaceous, except dorsum of abdomen, pale reddish; tubercles on connexivum mostly piceous; segments 5–7 dorsally suffused with black. Basal half of clavus and extreme base of corium reddish; base of veins of membranal cells and an irregular suffusion on corium apically pale luteous; membrane faintly infumate; venation darker. Coxae with piceous spots. Vein SC of metathoracic wing pale yellow, except apical fourth violaceous; wing faintly infumate, iridescent; remaining veins dark brown. In the male, the pygophore has two large, suffused piceous spots.

Structure Basal segment of antennae strongly tuberculate and with a long tubercle on upper apical margin; segment less than half as long as produced portion of vertex; tylus with moderately long, setigerous tubercles; produced portion of vertex from above and from the side acute apically. Head sparsely tuberculate. Anterior lobe of pronotum with conical, acute, moderately long and short tubercles; lateral angles of collar conically produced; posterior lobe with strong carinae anteriorly, sub-dorsally; humeral angles conical, strongly

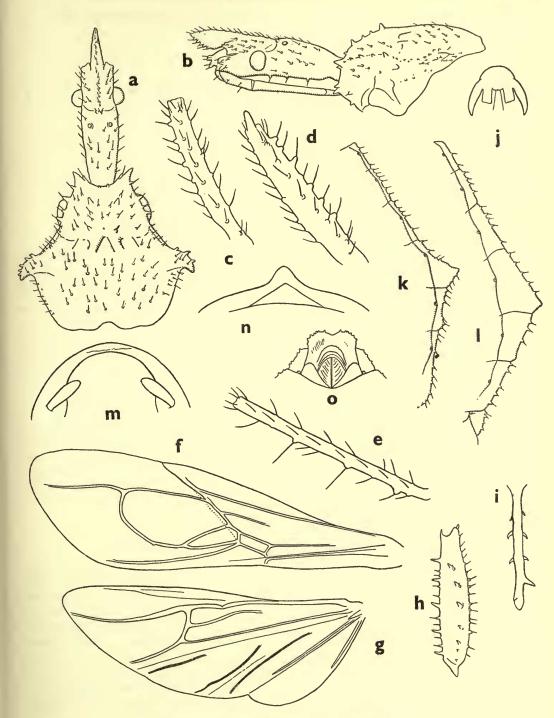


FIG. 9.—Henricohahnia typica (Distant).

recurved, tuberculate; posterior margin of lobe feebly undulate. Hemelytra extending very little beyond apex of abdomen.

Total length: 3, 11.50 mm.; 9, 13.50 mm.Hemelytra: 3, 7.00 mm.; 9, 8.00 mm.Greatest pronotal width: 3, 3.00 mm.; 9, 3.80 mm.

1<sup>Q</sup> (holotype), Assam, Sikkim, 53, 3<sup>Q</sup>, same locality (Atkinson Coll., B.M. 1892-6); 13, N. Khasia, 1,500-3,000 ft. (Distant Coll., B.M. 1911-383).

#### Henricohahnia montana (Distant)

(Fig. 10)

Forestus montanus Distant, 1903, Ann. Mag. Nat. Hist. (7), 11, 252. Henricohahnia montana (Distant), 1903, Fauna Brit. India Rhynchota 2, 388).

The following is a description of the male :

Colour: Head and thorax piceous; anteocular laterally with a light brown spot in front of eyes; postocular in front and between ocelli, extreme base of head, anterior lobe of pronotum, propleural epimeron, metapleural acetabula anteriorly and rostrum, light brown. Posterior margin of posterior lobe of pronotum suffused with brown. Meso- and metasternum and abdomen ventrally, light brown with faint reddish suffusion. Femora piceous; tibiae brown with a pale yellowish annulation interrupted on outer surface. Corium brown with an irregular luteous spot at base of veins of membrane and with piceous suffusion; membrane and meta-thoracic wings faintly infumate, iridescent. Setae and pubescence pale fulvous.

Structure : Basal segment of antennae a little less than twice as long as produced portion of vertex, feebly tuberculate ; remaining segments without tubercles and with dense, short setae and sparse longer setae. Head sparsely tuberculate except basally, laterally ; ventro-lateral margin with moderately long tubercles. Basal segment of rostrum extending to middle of eyes. Tubercles on anterior lobe of pronotum short, conical except tuberculate, except at humeral angles ; lobe with an arcuate carina sub-dorsally and a short transverse carina from humeral angles ; posterior margin sinuate ; spines at humeral angles thick, rounded apically and directed posteriorly somewhat. Disc of scutellum deeply depressed ; carina with a few tubercles. Segment 7 of abdomen dorsally transversely striate in apical half ; segments 5 and 6 of connexivum produced ; external margin of segments with low, setigerous tubercles ; connexivum ventrally very narrow ; spiracles with ostiole directed outwards ; lateral margin of abdomen ventrally carinate.

Total length : 3, 13.00 mm.; 9, 14.00 mm. Hemelytra : 3, 7.50 mm.; 9, 8.00 mm. Greatest pronotal width : 3, 4.00 mm.; 9, 4.50 mm.

The holotype of *H. montana*, a female from Mungphu, Assam (Distant Coll., B.M. 1913-451), in the British Museum, differs in coloration from the male in having the head and body dark testaceous and the apex of the corium luteous. The 3rd antennal segment is pale yellow in the basal half. The basal antennal segment is strongly tuberculate and segment 2 is relatively shorter and has a few tubercles. The spiracles are normal and the connexivum wide ventrally. In the British Museum there is also a male from E. Garo, Assam, collected at an altitude between 1,500 and 2,500 ft. (Distant Coll., B.M. 1911-383), and a male and a female from N. Khasia from a similar altitude (B.M. 1914-383). There are also females from Shillong, Assam, altitude 4,000 ft. (B.M. 1913-451).

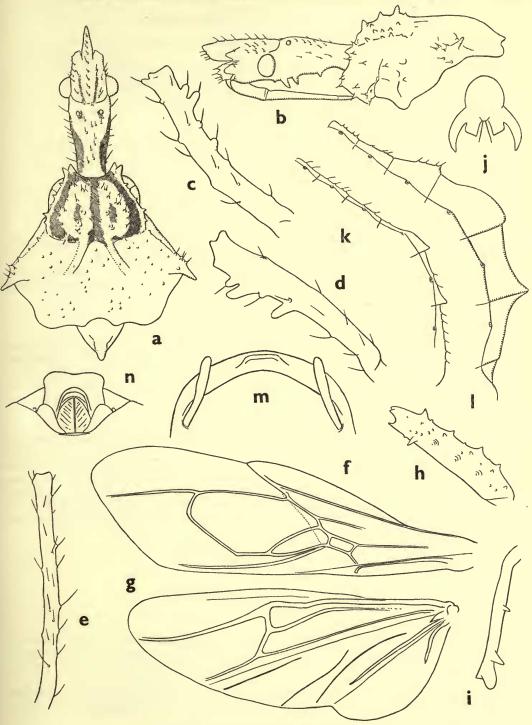


FIG. 10.—Henricohahnia montana (Distant).

#### Key to Genera allied to Henricohahnia.

Basal antennal segment with moderately long cylindrical tubercles; abdomen mid-
ventrally carinate; coxae and trochanters spinose Henricohahnia Breddin.
Basal antennal segment with low, rounded tubercles; abdomen not carinate ventrally;
coxae sometimes with a very few spines; trochanters without spines 2.
Head and anterior lobe of pronotum with strong black pattern . Tapirocoris gen. nov.
Head and anterior lobe of pronotum without pattern
Head and pronotum with abundant, low tubercles
Head and pronotum with sparse low tubercles 5.
Humeral angles narrowly rounded or conical; anterior tibiae with few or no spines
Karenocoris gen. nov.
Humeral angles broadly rounded ; anterior tibiae with six or more spines
Malaiseana gen. nov.

## Key to Species of Karenocoris gen. nov.

 I. Head and pronotum strongly tuberculate; humeral angles conical .
 2.

 -. Head and pronotum moderately tuberculate; humeral angles rounded .
 pustulatus sp. n.

2. Posterior margin of posterior pronotal lobe undulate with deep median incision

badgleyi (Distant).

-. Posterior margin of posterior pronotal lobe undulate . . . inermis (Distant).

#### Karenocoris gen. nov.<sup>1</sup>

Size small. Basal segment of antennae tuberculate, longer than anteocular. Postocular longer than anteocular with sides parallel; constricted basally. Head cylindrical, shorter than pronotum, ventro-laterally spinose; entirely tuberculate, except ventrally, basally and a narrow area on vertex, smooth; vertex produced anteriorly. Ocelli small, widely separated. Basal segment of rostrum extending to middle of eyes, a little more than half as long as segment 2; segments 2 and 3 straight. Pronotum longer than wide; anterior lobe shorter than posterior lobe; both lobes with a median sulcus and tubercles which are arranged in rows on anterior lobe; posterior margin of posterior lobe undulate. Scutellum longer than wide, produced apically. Pleura, abdomen ventrally and lateral margins of connexival segments tuberculate. Hemelytra with internal cell of membrane very small; corrum pubescent; base of cells of membrane sclerotized. Femora smooth; anterior and median femora with tubercles on upper and lateral surfaces; anterior femora with a row of spines on lower outer surface and a single spine on inner lower surface; median femora with a spine on lower surface; anterior and median tibiae tuberculate; anterior tibiae sinuate apically and with a projection sub-apically; tarsi tuberculate.

Type species : Karenocoris pustulatus sp. n.

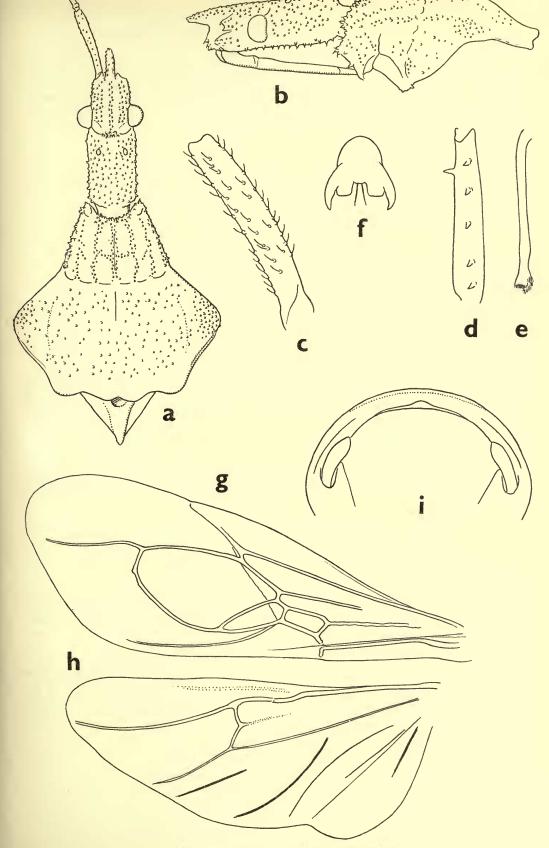
### Karenocoris pustulatus sp. n.

## (Fig. 11)

Colour: Antennae, head, thorax, legs, abdomen ventrally and corium, dark testaceous; head, pronotum and propleural epimeron suffused with piceous. Abdomen dorsally black; connexival segments with a small yellowish spot basally. Tubercles piceous. Tibiae suffused with piceous apically

Structure : Basal segment of antennae feebly curved and feebly tuberculate, the tubercles setigerous. Produced portion of vertex from above narrow with the sides parallel. Transverse

<sup>1</sup> Karen, a Burmese people.



TT is breated along any m

sulcus on vertex situated behind eyes and interrupted medially. Ocellar interspace less wide than distance between an ocellus and an eye. Anterior margin of anterior pronotal lobe strongly tuberculate; sulcus on anterior lobe very narrow, not extending to anterior or posterior margins; sulcus on posterior lobe very feebly indicated. Disc of scutellum deeply foveolate; produced apical portion horizontal. Abdomen dorsally smooth, except apical third of 7th segment, transversely rugose.

Total length, 11·30 mm. Hemelytra, 7·60 mm. Greatest pronotal width, 3·10 mm.

13 (holotype), Upper Burma, Seinghka Valley, Aduna confluence, 28.5 N.-97.35 E., 4,500, 3.V.1926 (E. Kingdon Ward) (B.M. 1926-400).

# Karenocoris inermis (Distant)

(Fig. 12)

Forestus inermis Distant, 1903, Ann. Mag. Nat. Hist. (7) 11: 253. Henricohahnia inermis (Distant), 1904, Fauna Brit. Ind. Rhynchota 2: 389.

Colour: Testaceous. Dorsal surface of abdomen piceous; connexivum dark testaceous with a yellowish spot basally. Membrane infumate.

Structure. Basal segment of antennae feebly curved with short curved setae arising from tubercles. Produced portion of vertex relatively short, thick, narrowly rounded apically. Posterior lobe of pronotum rugose, tuberculate; humeral angles sub-conical; posterior margin of lobe undulate with feeble median incision. Disc of scutellum damaged; apex sub-acute. Anterior tibiae with two spines sub-basally; anterior femora with 7 spines on lower inner surface and I spine on lower outer surface. Hemelytra extending just beyond apex of abdomen.

Total length, 13.00 mm.

Hemelytra, 7.50 mm.

Greatest pronotal width, 3.10 mm.

The type of *Karenocoris inermis*, a female, is from Mungphu (Atkinson Coll., Brit. Mus. 1892-6). In the British Museum there is also a female from Sikkim (B.M. 1911-383).

## Karenocoris badgleyi (Distant)

(Fig. 13)

Henricohahnia badgleyi Distant, 1909, Ann. Soc. ent. Belg. 53: 373.

Colour: Antennae, head, posterior lobe of pronotum, piceous; anterior lobe of pronotum and rostrum, brown. Pleura, sterna, legs light brown; pleura suffused with piceous. Abdomen dorsally black; connexivum brown with a yellow spot on each segment basally; abdomen ventrally testaceous with brown suffusion laterally and dark brown tubercles. Corium brown; membrane hyaline, infumate.

Structure: Basal segment of antennae feebly curved with short, curved, spatulate setae arising from tubercles. Produced portion of vertex moderately thick, about half as long as basal antennal segment. Both lobes of pronotum smooth, tuberculate; anterior lobe feebly depressed medially; tubercles on posterior lobe arranged more or less in transverse rows; humeral angles sub-acute; median incision on posterior lobe of pronotum deep, acute angular. Hemelytra extending just beyond apex of abdomen.

Total length, 11.00 mm.

Hemelytra, 7.00 mm.

Greatest pronotal width, 3.00 mm.

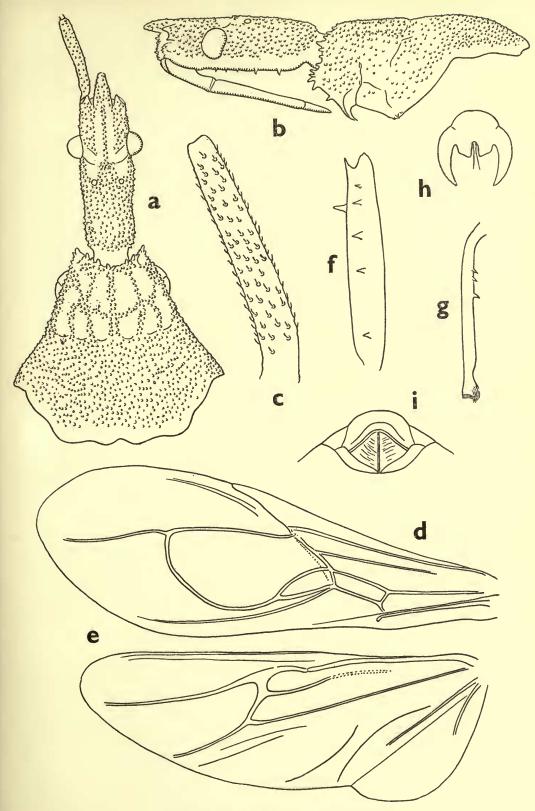


FIG. 12.—Karenocoris inermis (Distant).

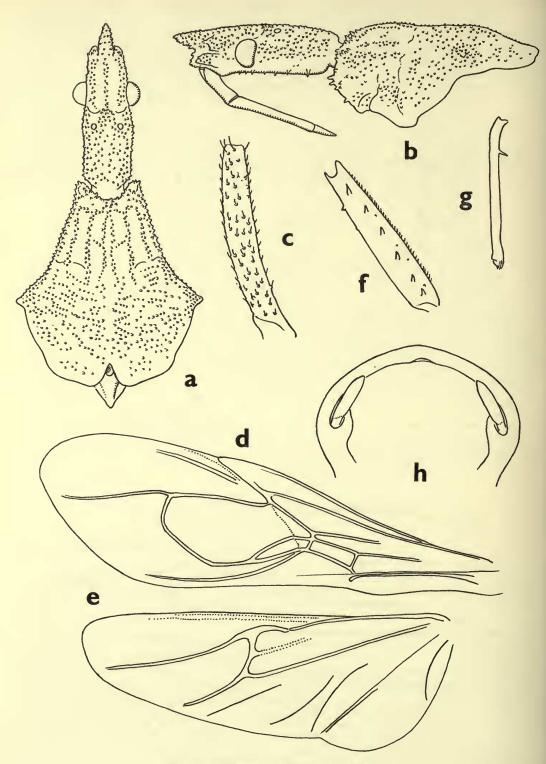


FIG. 13.—Karenocoris badgleyi (Distant).

The type of *Karenocoris badgleyi*, a male, is from Assam; collector W. F. Badgley (B.M. 1906–185). There is also a male from the same source.

#### Malaiseana gen. nov.<sup>1</sup>

Size small. Basal segment of antennae tuberculate, longer than anteocular; postocular longer than anteocular, somewhat globose then narrowed. Head cylindrical, shorter than pronotum; dorsally tuberculate; vertex produced anteriorly; gular region with spines. Ocelli small, widely separated. Basal segment of rostrum extending beyond anterior margin of eyes, less than half as long as segment 2; segments 2 and 3 straight. Pronotum wider than long; transverse sulcus indistinct medially; both lobes tuberculate and medially longitudinally sulcate, the sulcus not extending to posterior margin of either lobe; posterior margin of posterior lobe undulate. Scutellum longer than wide, triangular with apex produced. External apical angle of connexival segments 5 and 6 produced; external margins of segments partly tuberculate. Abdomen tuberculate ventrally. Hemelytra with internal cell of membrane very small; base of cells of membrane sclerotized. Femora nodulose; anterior femora with spines on lower surface; median femora with a single spine on lower surface; tibiae shorter than femora; anterior tibiae with spines. Corium setose.

Type species : Malaiseana annulipes sp. n.

## Malaiseana annulipes sp. n.

## (Fig. 14)

Colour: Piceous. Segment 2 of rostrum dark brown. Acetabula, suffusion and spots on pleura and posterior lobe of pronotum, testaceous. Connexival segments with a yellowish spot basally; abdomen ventrally testaceous with suffusion and tubercles piceous; pygophore piceous. Tibiae and posterior femora with a median yellowish annulation.

Structure: Basal segment of antennae with short, forwardly directed setae arising from low tubercles. Produced portion of vertex sub-acute, feebly curved downwards, cylindrical. Vertex medially and inter-ocellar area, smooth, without tubercles. Ocellar interspace less wide than distance between an ocellus and an eye. Lateral angles of collar with low, conical tubercles. Disc of scutellum feebly depressed. Hemelytra extending a little beyond apex of abdomen. Anterior tibiae with 5 spines on outer and inner surfaces. Pale areas of connexivum not tuberculate.

Total length, 10.00 mm.

Hemelytra, 6.50 mm.

Greatest pronotal width, 3.00 mm.

13 (holotype), N.E. Burma, Kambaiti, 7000 ft., 18.v.1934 (R. Malaise) (B.M. 1935-630).

# Tapirocoris gen. nov.<sup>2</sup>

Size small. Basal segment of antennae tuberculate, longer than anteocular, postocular somewhat globose, constricted basally. Head shorter than pronotum; dorsally and laterally tuberculate; vertex produced anteriorly. Ocelli small, widely separated. Basal segment of rostrum half as long as segment 2, not extending to anterior margin of eyes; segments 2 and 3 straight. Pronotum wider than long; transverse sulcus interrupted medially; anterior lobe with setigerous tubercles laterally and some low, tubercles on disc; posterior lobe smooth;

<sup>1</sup> Dedicated to Dr. R. Malaise of the Stockholm Museum.

<sup>2</sup> In allusion to the shape of the head.

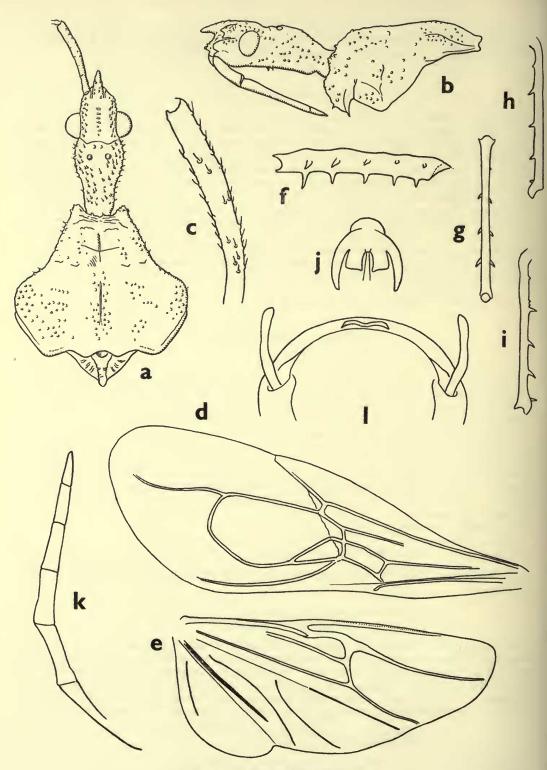


FIG. 14.—Malaiseana annulipes sp. n.

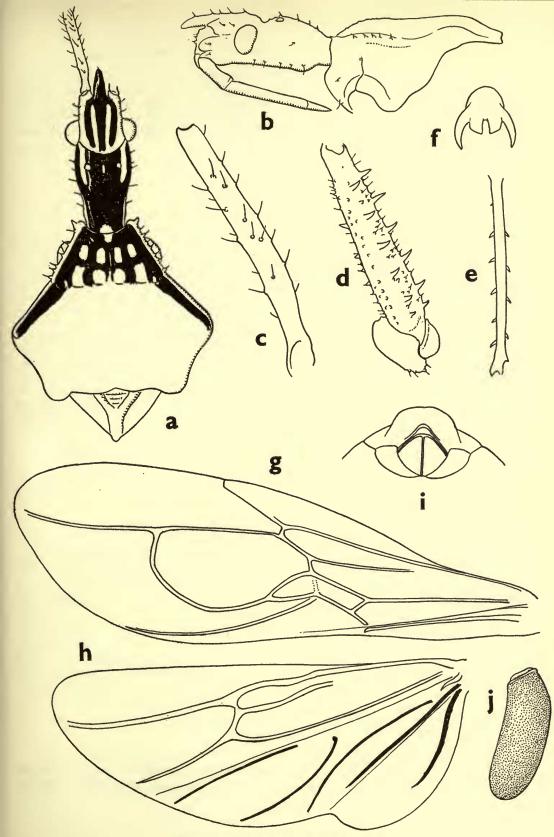


FIG. 15.—Tapirocoris limbatus sp. n.

anterior lateral angles acutely produced; posterior margin of posterior lobe undulate; anterior lobe with a median, longitudinal sulcus. Scutellum longer than wide; apex produced. Hemelytra with internal cell of membrane very small. Femora smooth, tuberculate; anterior femora with spines on upper and lower surface; median femora with spines on lower surface; anterior tibiae with spines on lower surface; anterior coxae tuberculate. External apical angle of connexival segments 5 and 6 produced.

Type species : Tapirocoris limbatus sp. n.

## Tapirocoris limbatus sp. n.

# (Fig. 15)

Colour: Testaceous. Head with three longitudinal stripes on vertex, produced portion of vertex, postocular, except a spot basally, a spot between ocelli, and an elongate spot laterally, pattern on anterior lobe of pronotum, sub-lateral area of posterior lobe, disc of scutellum, spots on coxae and pleura, shining black. Abdomen dorsally suffused with red; connexival segments with a large piceous spot; abdomen ventrally, meso- and metapleura with sparse small brown spots. Base of veins of metathoracic wing suffused with red. Tubercles and spines on legs piceous.

Structure. Basal segment of antennae with short, sub-erect setae arising from tubercles. Produced portion of vertex sub-acute apically, curved downwards feebly; sides feebly convex. Vertex with a few low tubercles in linear rows on vertex and a few on vertex laterally; transverse sulcus wide. Ocellar interspace a little less wide than distance between an ocellus and an eye. Posterior lobe of pronotum feebly, transversely rugose. Disc of scutellum depressed and transversely sulcate; apex very feebly produced. Hemelytra extending beyond apex of abdomen. Anterior tibiae with 6 spines on outer and 5 spines on inner surface. External apical angle of connexival segments 5 and 6 feebly produced, rounded.

Total length, 12·50 mm. Hemelytra, 8·50 mm. Greatest pronotal width, 3·50 mm.

 $1^{\circ}$  (holotype), Burma, Ruby Mines (*Doherty*) (B.M. 1911–383).

#### Key to Dicrotelus, Nyllius, Orgetorixa and Allied Genera

1. Brachypterous. Body narrow, elongate. Head and thorax without tubercles. Segment 9 of abdomen in female strongly lobately produced . Dicrotelus Erichson.

	Fully alate. Body elongate elliptical. Head and thorax tuberculate. Segment 9
	of abdomen in female moderately lobately produced 2.
2.	Internal cell of membrane absent Orgetoriza China.
	Internal cell of membrane present
	Internal cell of membrane small, elongate, triangular
	Internal cell of membrane very small
4.	Connexivum strongly tuberculate Neonyllius gen. nov.
	Connexivum with a large tubercle at external apical angle of segments 5.
	Segments 7 and 9 of connexivum produced, broadly rounded Paranyllius gen. nov.

#### Nyllius Stål

Nyllius Stål, 1859, Öfv. Vet. Ak. Förh. 16 (8) : 365. Nyllius Wygodzinsky, 1950, Proc. Linn. Soc., N.S.W. 75 : 87.

Corpus elongatum. Caput cylindricum, inter antennas sat longe spinoso productum. Antennae geniculatae, articulo I capite paullo breviore, crassiusculo, reliquis gracilibus. Rostrum articulo

basali brevi, secundo illo duplo longiore. Thorax medio constricto, lobo antico multi-spinuloso, postico ante scutellum sat profunde sinuato, angulis lateralibus horizontaliter extrorsum spinosoproductis. Scutellum apice acute productum. Tegmina alaeque completa. Pedes mediocres, femoribus anticis incrassatis, posticis sub-aequelongis, subtus infra medium spina armatis ; tibiis anticis femoribus sub-brevioribus. Abdomen margine spinulis obtusiusculis instructo; segmento apicali producto fisso.

Dicrotelo affine genus, corpore aspero, thorace constricto tegminibus completis distinctum.

#### Nyllius asperatus Stål

(Fig. 16)

Nyllius asperatus Stål, 1859, Öfv. Vet. Ak. Förh. 16 (8): 366.

Testaceus vel fusco testaceus, parce sericeus.

Stål's description quoted above omits reference to the following characters :

Produced portion of vertex acute apically in lateral view; produced portion of tylus somewhat narrow, rounded apically. Tubercles on head moderately long, slender. Spines on collar, on anterior lobe of pronotum and at humeral angles, slender, sub-acute. Produced portion of scutellum with erect, conical elevation apically; apex sub acute and somewhat curved downwards; disc narrowly deeply depressed; carinae moderately strongly tuberculate. Hemelytra extending almost to apex of abdomen.

Stål's colour description does not agree with that of the type which is ferruginous with the corium paler. Additional colour details are, clavus and membrane infumate, connexival tubercles white and black, abdomen mid-ventrally pale testaceous.

Another specimen, without any locality label, but with a paratype label, differs from the type in having only one membranal cell and is much paler in coloration.

Total length, 11.00 mm.

Hemelytra, 6.50 mm.

Greatest pronotal width, 2.00 mm.

Stål's type, a female in the Stockholm Nat. Riksmuseum, is labelled Nova Hollandia, without precise locality.

#### Paranyllius gen. nov.

Size small. Basal segment of antennae shorter than head. Head longer than pronotum; almost smooth with very sparse tubercles; vertex and tylus produced. Ocelli small. Basal segment of rostrum extending to middle of eyes. Pronotum wider than long; anterior lobe longer than posterior lobe; lateral angles of collar and humeral angles produced; both lobes smooth with a few tubercles; posterior lobe with carinae sub-dorsally, anteriorly; posterior margin excised. Scutellum longer than wide; produced apically; carinae of disc tuberculate. Hemelytra not extending to apex of abdomen; internal cell of membrane very small. External apical angle of connexival segments 2–6 tuberculately produced; external apical angle of segments 7 and 9 lobately produced; abdomen ventrally tuberculate. Anterior femora incrassate and with a spine on lower surface, sub-apically; all femora with a few tubercles; anterior and median tibiae shorter than femora.

Type species : Paranyllius turneri sp. n.

#### Paranyllius turneri sp. n.

(Fig. 17)

Colour: Testaceous. Metathoracic wings hyaline with testaceous venation. Apex of produced portion of vertex, apical segment of rostrum, annulations on anterior and median tibiae, brown. Tubercles on connexivum black. Setae and pubescence greyish.

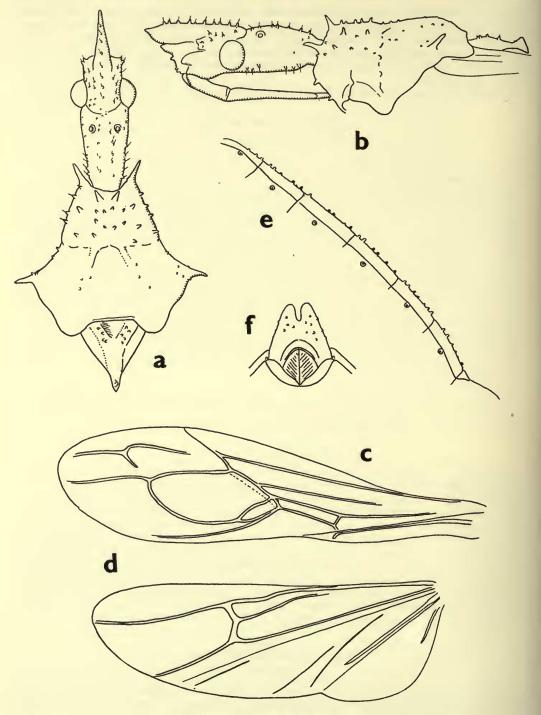


FIG. 16.—Nyllius asperatus Stål.

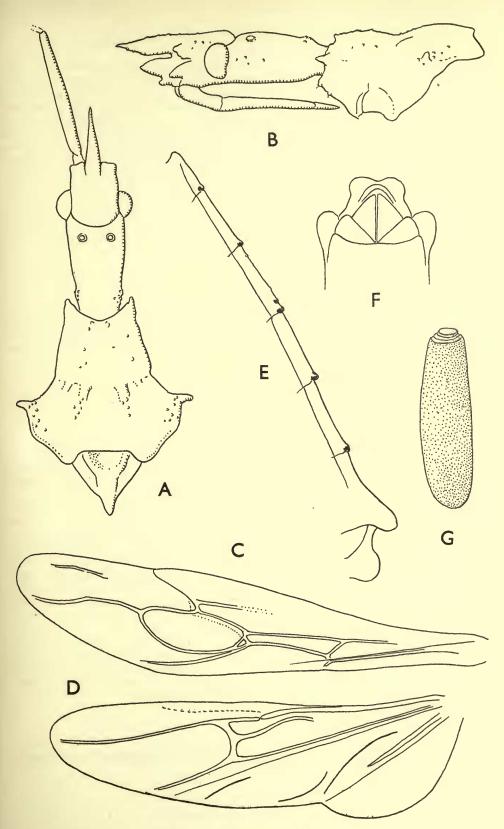


FIG. 17. Paranyllius turneri sp. n.

Structure. Basal segment of antennae a little more than twice as long as produced portion of vertex with a few rounded tubercles, sparse setae and dense adpressed setae; segment somewhat narrower basally and apically. Produced portion of vertex in dorsal and lateral view acute apically; produced portion of tylus in lateral view triangular, acute; antennal tubercles with minute setigerous tubercles. Head more or less smooth with very obscure, low tubercles, mainly on postocular, sub-basally; post-ocular feebly constricted in basal third. Lateral angles of collar conical, narrow, rounded apically and directed anteriorly; tubercles on anterior lobe of pronotum obscure; carinae on posterior lobe feeble with a few tubercles; lateral angles of lobe moderately strongly tuberculate; spines on humeral angles short, subacute; excision on posterior margin of posterior lobe wide. Disc of scutellum very feebly depressed; produced portion acute apically and rounded dorsally; tubercles on carinae very feeble. Hemelytra extending to apex of 7th abdominal segment. Tubercles on connexivum thick, rounded apically. Produced portion of segments 7 and 9 thick, rounded; tubercles on abdomen ventrally very sparse, low, rounded. Spine on lower surface of anterior femora very short, conical, thick.

Total length, 11.00 mm. Hemelytra, 6.00 mm. Greatest pronotal width, 2.10 mm.

19 (holotype), W. Australia, Yanchep, 32 m. N. of Perth, 29.i–8.ii.1936 (R. E. Turner) (B.M. 1936–28). An ovum extracted from this specimen is cylindrical, very feebly curved. Operculum with a circular elevation. Total length, 2.00 mm.

#### Paranyllius pudicus sp. n.

(Fig. 18)

Colour: Basal segment of antennae, head and thorax dark ferruginous; remaining segments of antennae light brown. Rostrum light brown. Abdomen dorsally brown; tubercles on connexivum black; abdomen ventrally testaceous. Corium ferruginous; membrane hyaline; venation testaceous. Legs testaceous; anterior and median tibiae with somewhat obscure dark brown annulations. Pubescence whitish.

Structure : Basal segment of antennae a little more than twice as long as produced portion of vertex with dense adpressed setae and sparsely tuberculate, the tubercles low, rounded and with sub-erect setae ; segment somewhat narrower basally and apically. Produced portion of vertex in dorsal and lateral view acute ; produced portion of tylus narrowly rounded apically and with short tubercles. Head sparsely tuberculate and with dense pubescence particularly sub-basally ; postocular very feebly constricted sub-basally. Lateral angles of collar irregularly tuberculate ; pronotum smooth with two moderately long tubercles anteriorly and with sparse low tubercles ; anterior lobe a little longer than posterior lobe ; posterior lobe feebly medially depressed anteriorly and with a feeble carina on each side of depression ; spines at humeral angles short, thick, rounded apically ; excision on posterior margin wide. Disc of scutellum very feebly depressed ; tubercles on carinae moderately large ; apex sub-acute and curved downwards feebly. Hemelytra extending just beyond apex of 7th abdominal segment ; internal cell of membrane very small, narrowly triangular. Tubercles on connexivum moderately long rounded apically ; produced portion of segments 7 and 9 narrowly rounded. Spine on lower surface of anterior femora narrowly conical, sub-acute.

Total length, 10.00 mm

Hemelytra, 6.00 mm.

Greatest pronotal width, 2.00 mm.

19 (holotype), S.W. Australia, Yalingup, 1–12 Dec. ; 19 (paratype), same locality, Nov., 1913 (R. E. Turner) (B.M. 1914–190).

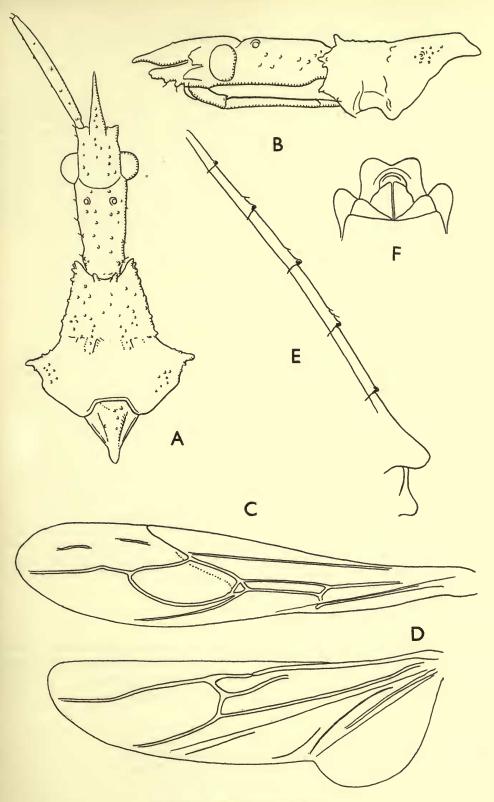


FIG. 18.—Paranyllius pudicus sp. n.

#### Neonyllius gen. nov.

Size small. Basal segment of antennae shorter than head with a few setigerous tubercles; segment 2 half as long as I; segment 3 a little shorter than 2. Head longer than pronotum; vertex and tylus produced; vertex and postocular dorsally and laterally with setigerous tubercles. Ocelli small, elevated. Basal segment of rostrum extending to middle of eyes. Both lobes of pronotum with setigerous tubercles; humeral angles and lateral angles of collar spinously produced; posterior lobe carinate anteriorly, sub-dorsally; posterior margin excavate. Disc of scutellum depressed; lateral carinae tuberculate; apex produced, acute and with a vertical conical elevation. Membrane with internal cell very small. External margins of connexival segments tuberculate; apical margin of 7th abdominal segment medially excised. Anterior femora moderately incrassate with a spine on lower surface sub-apically; all femora tuberculate. Segment 9 of abdomen in female lobately produced apically.

Type species : Neonyllius echinus sp. n.

#### Neonyllius echinus sp. n.

## (Fig. 19)

Colour: Basal segment of antennae testaceous with obscure ferruginous annulations; remaining segments brown or slightly ferruginous. Segments 1 and 2 of rostrum testaceous; apical segment piceous. Head, anterior lobe of pronotum, propleural episternum, meso- and metapleura and sterna, piceous; tubercles ferruginous; posterior lobe of pronotum, propleural epimeron and acetabula testaceous. Abdomen dorsally brown; connexivum yellowish white with tubercles on apical portion of each segment, black; abdomen ventrally testaceous; tubercles light brown. Corium testaceous faintly suffused with ferruginous; apex black; membrane hyaline, faintly infumate. Femora testaceous with suffusion and tubercles ferruginous; tibiae with obscure brownish annulations; tarsi light brown. Pubescence whitish.

Structure : Basal segment of antennae almost thrice as long as produced portion of vertex ; tubercles mostly in basal half. Produced portion of vertex in dorsal view acute apically ; in lateral view triangular ; produced portion of tylus in lateral view sub-acute apically, conical and with moderately long setigerous tubercles. Spines on collar slender ; on humeral angles moderately thick, rounded apically and with setigerous tubercles ; tubercles on both lobes of pronotum moderately long and thick ; excavation on posterior lobe of pronotum very wide. Tubercles on connexivum moderately long, thick, irregularly spaced ; median incision on 7th abdominal segment feeble. Spine on lower surface of anterior femora short, acute. Lobes on 9th abdominal segment moderately long, rounded apically.

Total length : 3, 10.00 mm. ; 9, 11.00 mm.

Hemelytra : 3, 5.50 mm. ; 9, 6.50 mm.

Greatest pronotal width : 3, 2.70 mm.; 9, 3.00 mm.

13 (holotype), 19 (paratype), Australia, Queensland, ex coll. Fruhstorfer (Vienna Museum). The ovum of this species, dissected from the paratype is cylindrical, narrowed towards the opercular end and with one side almost straight. The operculum has a short cylindrical elevation in the middle. Total length, 2.20 mm.

## Key to Species of Orgetorixa

3. 2.

1. Head, pronotum, segments 2 and 3 of abdomen dorsally black . . . .

-. Head, pronotum, segments 2 and 3 of abdomen dorsally dark brown

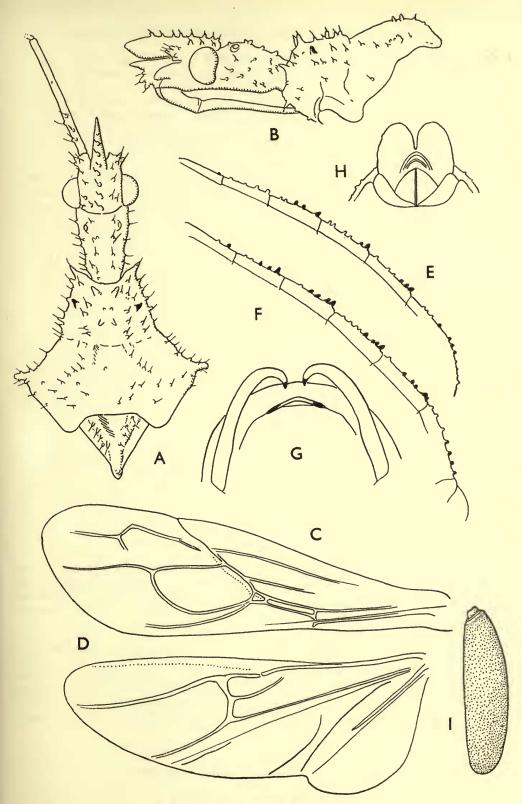


FIG. 19.—Neonyllius echinus sp. n.

Wygodzinsky, 1950 (Proc. Linn. Soc. N.S.W., 75:87) in referring to Orgetorixa states that "There is nothing in China's description that would differentiate his Orgetorixa from Stål's Nyllius. It is possible that China's only species australicus (sic) is different from Nyllius asperatus Stål considering its larger size. We therefore maintain China's species for the time being."

I have been able to compare the type of *Nyllius asperatus* with the type of *Orgetorixa australica* and am convinced that China's genus should be maintained. The differences between the two genera are :

#### Orgetorixa

#### Nyllius

	•	-					
Basal segment of antennae .	Longer than head .	Shorter than head.					
Postocular	Strongly constricted basally .	Feebly constricted basally.					
Basal segment of rostrum .	Extending a little beyond .	Extending just beyond an-					
	middle of eyes	terior margin of eyes.					
Scutellum	Carinae feebly tuberculate; .	Carinae strongly tuberculate;					
	apical spine acute, round-	apical spine with conical					
	ed dorsally	elevation dorsally.					
Connexivum	Feebly tuberculate .	Strongly tuberculate.					
Internal cell of membrane .	Absent .	Present.					
Produced 9th segment of ab-							
domen	Lobes short, rounded .	Lobes lamellate, sub-acute.					
Tylus	Produced; laterally com	Tuberculate.					
	pressed						

#### Orgetorixa evansi sp. n.

# (Fig. 20)

Colour: Antennae, rostrum, legs testaceous. Head, anterior lobe of pronotum, and scutellum, black; posterior lobe piceous; spines and tubercles on both lobes of pronotum and apex of scutellum, ferruginous. Corium ferruginous; clavus and membrane hyaline, pale infumate. Prosternum testaceous; meso- and metasternum black. Abdomen testaceous; segments I, 2 and 3 dorsally black. Pubescence grey.

Structure : Produced portion of vertex sub-acute apically in lateral view ; produced portion of tylus obliquely truncate with low tubercles and a longer tubercle at lower angle. Head sparsely tuberculate ; lateral spines on collar moderately thick, sub-acute. Spines on anterior lobe of pronotum medially anteriorly rounded apically and somewhat constricted medially ; both lobes with sparse tubercles. Disc of scutellum moderately deeply depressed ; lateral carinae irregularly tuberculate ; apex sub-acute ; in lateral view, rounded. External margins of connexivum with a few small tubercles in apical half of each segment. Hemelytra extending just beyond apex of abdomen.

Total length : 3, 11.50 mm. ; 9, 13.50 mm.

Hemelytra : 3, 7.30 mm. ; 9, 8.00 mm.

Greatest pronotal width (excluding spines) : 3, 2.00 mm.; 9, 2.50 mm.

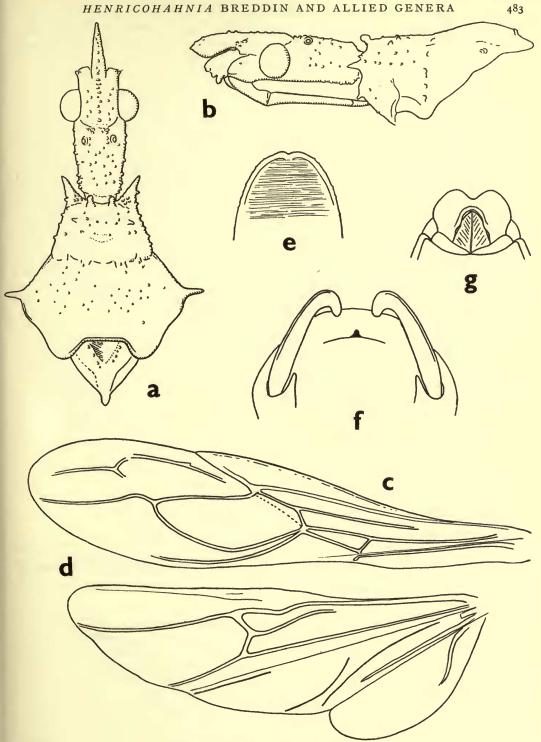


FIG. 20.—Orgetorixa evansi sp. n.

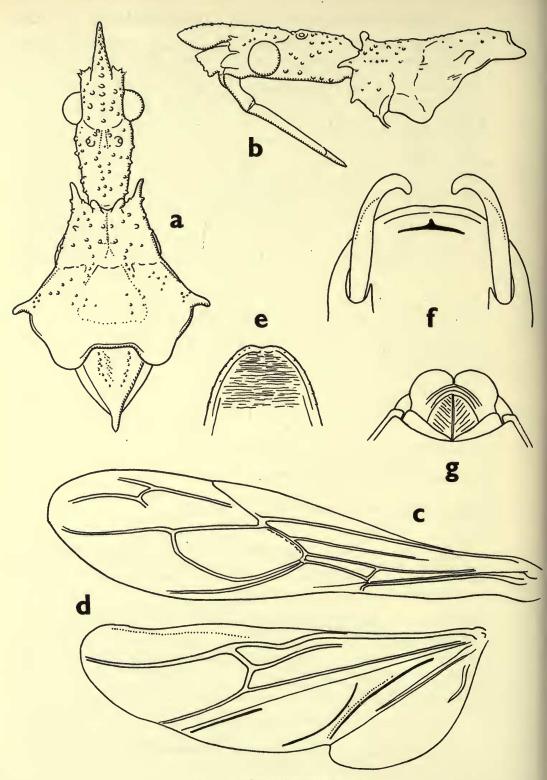


FIG. 21.—Orgetorixa saeva sp. n.

13 (holotype), Tasmania, New Norfolk, 31.x.1935; 12 (paratype), Margate, ii.1936 (J. W. Evans) (B.M. 1948-352).

## Orgetorixa saeva sp. n.

(Fig. 21)

Colour: Basal segment of antennae pale ferruginous with pale testaceous annulations; segment 2 pale ferruginous; remaining segments light brown. Head, pronotum, propleura brownsh ferruginous with tubercles pale ferruginous. Rostrum light brown; apical segment suffused with ferruginous. Scutellum ferruginous with apex testaceous. Meso- and metapleura, sterna, and abdomen ventrally, light brown with faint ferruginous suffusion; abdomen dorsally yellowish. Corium ferruginous with yellowish suffusion apically; clavus and membrane hyaline, faintly infumate. Femora ferruginous; tubercles darker; tibiae brown with faint ferruginous suffusion.

Structure : Produced portion of vertex in lateral view broadly conical; produced portion of tylus truncate, minutely tuberculate. Tubercles on head sparse, moderately large. Tubercles on collar, anterior lobe of pronotum anteriorly and on humeral angles, thick, rounded apically; anterior lobe feebly, transversely, depressed medially; posterior lobe with feeble carinae anteriorly, sub-dorsally and feebly depressed between carinae; posterior lobe sparsely tuberculate. Disc of scutellum feebly depressed; carinae feebly tuberculate; apex acute and somewhat curved downwards; rounded dorsally. Hemelytra extending just beyond apex of abdomen. Connexivum marginally with feeble tubercles.

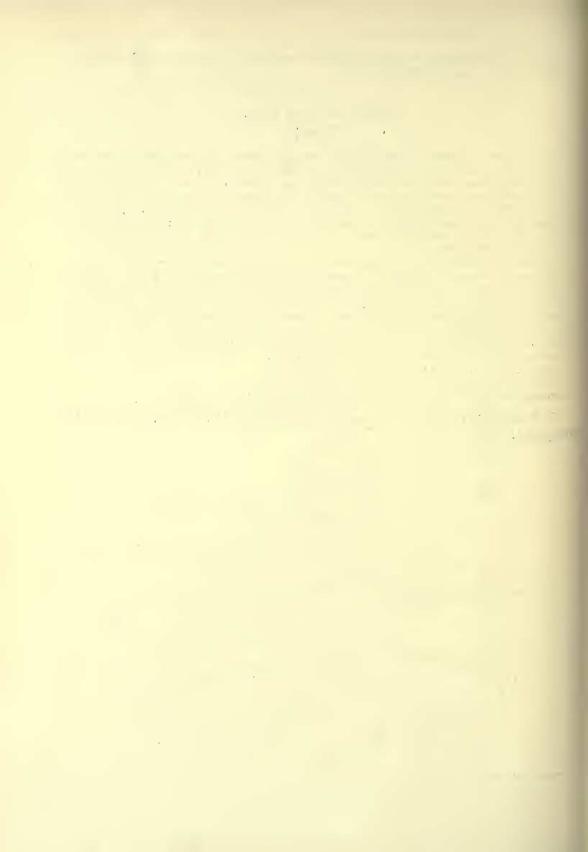
Total length : 3, 12.50 mm. ; 9, 14.00 mm.

Hemelytra : 3, 7.30 mm. ; 9, 7.50 mm.

Greatest pronotal width (excluding spines) : 3, 3.00 mm.; 9, 3.40 mm.

13 (holotype), 19 (paratype), Australia, N.S. Wales, Dorrigo (W. Heron) (B.M. 1934-232).







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